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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/623,434

07/17/2003

Yuli Zhou

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04/29/2009

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PATENT DEPARTMENT
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EXAMINER

HAMILTON, LALITA M

ART UNIT

PAPER NUMBER

3691

MAIL DATE

DELIVERY MODE

04/29/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/623,434	Applicant(s) ZHOU ET AL.	
	Examiner Lalita M. Hamilton	Art Unit 3691	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to the amendment filed on December 31, 2008.

Claim Rejections - 35 USC § 112

The rejection has been withdrawn.

Claim Rejections - 35 USC § 101

The rejection has been withdrawn.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Kaminsky (7,356,498), as set forth in the previous Office Action.

Kaminskey further discloses receiving a trade order at an order router comprising a processor and carrying out the method using the order router (col.13, lines 5-35 and col.16, lines 45-60).

Response to Arguments

Applicant's arguments filed December 31, 2008 have been fully considered but they are not persuasive. The Applicant argues that Kaminsky does not disclose an order router is configured to: a) receive trade orders, b) receive quotes from the algorithm engine that

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are generated without access to the trade orders, c) receive quotes from an NBBO feed; d) analyze quotes received from the algorithm engine and the NBBO feed, e) determine whether the trade order can be filled with improvement from the NBBO quotes by comparing the trade order to the NBBO and algorithm engine quotes and f) transmit the trade order to one of i) a marketplace where the trade order can be filled with improvement from the NBBO quote or ii) a marketplace where the trade order can be filled at the NBBO quote; receiving a quote at the order router that is generated from an algorithm engine that does not have access to the trade order and the order router selecting a marketplace for the trade order based on comparing the analyzed quotes to the trade order; receiving at the order router a quote from an algorithm engine that is generated without having access to the trade order and the order router determining whether the trade order can be filled with improvement from the NBBO quote based on comparing the algorithm engine and NBBO quotes to the trade order, order router is configured to a) receive and analyze trade orders, quotes received from an algorithm engine that does not have knowledge of the trade orders, and quotes received from a National Best Bid and Offer (NBBO) feed and b) determine whether the trade orders can be filled with improvement from the NBBO quotes based on comparing the trade order to the quotes from the algorithm engine and the NBBO feed; filling an order with improvement from the NBBO at a marketplace that is a reporting facility; or algorithm engine is programmed to quote a predetermined improvement from the NBBO algorithm engine is programmed with information comprising proprietary trading strategies of a

broker-dealer and characteristics of marketplaces that could affect price, size, and speed with which the trade order can be filled.

In response, Kaminsky disclose an order router is configured to: a) receive trade orders, b) receive quotes from the algorithm engine that are generated without access to the trade orders, c) receive quotes from an NBBO feed, d) analyze quotes received from the algorithm engine and the NBBO feed, e) determine whether the trade order can be filled with improvement from the NBBO quotes by comparing the trade order to the NBBO and algorithm engine quotes and f) transmit the trade order to one of i) a marketplace where the trade order can be filled with improvement from the NBBO quote or ii) a marketplace where the trade order can be filled at the NBBO quote (the market maker may intervene and modify quotes based on algorithms containing subjective data to control individual risk—col.13, lines 5-35 and col.16, lines 45-60); receiving a quote at the order router that is generated from an algorithm engine that does not have access to the trade order and the order router selecting a marketplace for the trade order based on comparing the analyzed quotes to the trade order (the market maker may intervene and modify quotes based on algorithms containing subjective data to control individual risk—col.13, lines 5-35 and col.16, lines 45-60); receiving at the order router a quote from an algorithm engine that is generated without having access to the trade order and the order router determining whether the trade order can be filled with improvement from the NBBO quote based on comparing the algorithm engine and NBBO quotes to the trade order, order router is configured to a) receive and analyze trade orders, quotes received from an algorithm engine that does not have knowledge of the trade orders,

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and quotes received from a National Best Bid and Offer (NBBO) feed and b) determine whether the trade orders can be filled with improvement from the NBBO quotes based on comparing the trade order to the quotes from the algorithm engine and the NBBO feed (the NBBO contains information available to public; the market maker may intervene and modify quotes based on algorithms containing subjective data to control individual risk—col.13, lines 5-35 and col.16, lines 45-60); filling an order with improvement from the NBBO at a marketplace that is a reporting facility(the market maker may intervene and modify quotes based on algorithms containing subjective data to control individual risk—col.13, lines 5-35 and col.16, lines 45-60); or algorithm engine is programmed to quote a predetermined improvement from the NBBO algorithm engine is programmed with information comprising proprietary trading strategies of a broker-dealer and characteristics of marketplaces that could affect price, size, and speed with which the trade order can be filled (the NBBO contains information available to public; the market maker may intervene and modify quotes based on algorithms containing subjective data to control individual risk—col.13, lines 5-35 and col.16, lines 45-60).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lalita M. Hamilton whose telephone number is (571) 272-6743. The examiner can normally be reached on Tuesday-Thursday (6:30-2:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kalinowski Alexander can be reached on (571) 272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Lalita M Hamilton/
Primary Examiner, Art Unit 3691